



SECOR
INTERNATIONAL
INCORPORATED

www.secor.com

March 29, 2005
PN 14BP.01033.03.0630

Mr. Tom Shih
Los Angeles Regional Water Quality Control Board
320 West 4th Street, Suite 200
Los Angeles, California 90013

RE: Well Abandonment Report
ARCO Facility 01033
22661 Pacific Coast Highway
Malibu, California
ID No. I-06026

Dear Mr. Shih:

SECOR International Incorporated (SECOR), on behalf of the Atlantic Richfield Company (Atlantic Richfield), documenting the destruction of the existing well network (Wells MW-1R through MW-3R, MW submits this report documenting the destruction of the existing well network (Wells MW-1R through MW-3R, MW-5 and MW-7 through MW-10) at the referenced site (Figure 1 and 2). This submittal is prepared in the response to the Los Angeles California Regional Water Quality Control Board (LACRWQCB) December 20, 2004 correspondence stating, "...that no further action related to the petroleum release(s) at the site is required." (Appendix A) The LACRWQCB correspondence required Atlantic Richfield to submit a well abandonment report by March 15, 2005. In a phone conversation conducted on March 14, 2005 between Ms. Cathy Sanford of SECOR and Mr. Tom Shih with the LACRWQCB, a two week extension to submit the report was requested and granted. The phone conversation is documented in SECOR's March 14, 2005 correspondence included in Appendix B. Field activities were completed on March 15, 2005 as the generated waste stream was properly disposed/recycled.

SCOPE OF WORK

Pre-Field Activities

A site-specific Health and Safety Plan (HASP) was prepared for use by SECOR personnel. The HASP addressed issues such as: clearing of above and below ground utilities prior to commencement of drilling operations, hospital location, and a subsurface clearance checklist. SECOR marked the proposed boring locations and notified Underground Service Alert (USA) (Ticket # A0470521) approximately one week in advance of the well abandonment date to clear well locations of potential subsurface utilities. SECOR also coordinated with Spectrum Geophysics of Burbank, California to investigate the subsurface conditions for possible obstructions not covered by USA and to determine if the well locations were clear for abandonment. All pre-field activities were conducted according to Atlantic Richfield's "Precautionary Procedures and Guidelines Document for Drilling, Subsurface Investigations and Remedial Construction Activities for GEM Retail Operations." Furthermore, prior to the implementation of field activities all appropriate well destruction permits were obtained from the Los Angeles County Department of Health Services (LACDHS) and the required encroachment Permit was obtained from the State of California Department of Transportation (DOT). Copies of the permits are provided as Appendix C.

Well Destruction Activities

On February 22 and March 9, 2005, SECOR supervised West Hazmat Drilling Corporation (West Hazmat) of Anaheim, California (C-57 554979) during for the destruction of Wells MW-1R through MW-10. All well destruction activities were conducted in accordance with LACDHS and DOT permit requirements and in accordance with the State of California Well Standards. Wells MW-1R, MW-2R, MW-3R, and MW-10 were hand cleared to five feet below ground surface (bgs) and pressure grouted through a tremie pipe with a voclay grout / Portland cement mixture from total depth of the well to five feet bgs. Once the cement-bentonite mixture stabilized, the upper five feet of the well casing was over-drilled and removed using 8-inch diameter hollow-stem auger. The boreholes were then capped with concrete and finished to match the existing ground surface. Well construction details are included in the Boring Logs provided as Appendix D.

Wells MW-7 and MW-9 were cleared using an air-knife to five feet bgs and pressure grouted through a tremie pipe with a voclay grout / Portland cement mixture from total depth of the wells to five feet bgs. Once the cement-bentonite mixture stabilized, the upper five feet of the well casing was over-drilled and removed using 8-inch diameter hollow-stem auger. Due to identified underground utilities that appear to have been installed after the wells, Wells MW-5 and MW-8 were pressure grouted through a tremie pipe with a voclay grout / Portland cement mixture from total depth of the wells to five feet below ground bgs. The boreholes were then capped with concrete and finished to with asphalt match the existing ground surface. A site plan with well destruction locations is provided as Figure 2.

Materials generated during field activities were temporarily stored on-site in labeled DOT approved 55-gallon steel drums. SECOR then coordinated with Belshire Environmental Incorporated (Belshire) services, under contract to Atlantic Richfield, to remove generated waste from the site. Drums were transported off-site by Belshire and taken to TPS Technologies Incorporated, an Atlantic Richfield approved and California State Certified disposal facility, in Adelanto, California.


STANDARD LIMITATIONS

All work was performed under the supervision of a registered geologist as defined in the Registered Geologist Act of the California Code of Regulations. The information contained in this report represents SECOR's professional opinions, and is based in part on information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.


If there are any questions regarding this submittal, please contact Ms. Cathy Sanford at (714) 379-3366 extension 276.

Sincerely,
SECOR International Incorporated


Prepared:

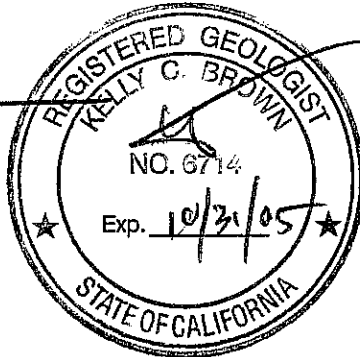

Eric Young
Environmental Scientist
Project Manager

Reviewed:


Cathy Sanford
Associate Geologist

Approved by:


Kelly C. Brown, RG 6714
Principal Geologist



Attachments: Figure 1 – Site Location Map
Figure 2 – Site Plan with Former Well Locations

Appendix A – LACRWQCB's December 20, 2004 Correspondence Letter
Appendix B – SECOR's March 14, 2005 Correspondence Letter
Appendix C –Permits
Appendix D – Boring Logs

cc: Mr. Roy Thun, Atlantic Richfield Company
Mr. Don Dalbey, State of California, Department of Transportation
Mr. Rick Weintraub, Property Owner



CALIFORNIA

QUADRANGLE LOCATION



NORTH

SCALE
1 inch = 2000 feet
0 1000 2000

REFERENCE: USGS 7.5 MINUTE QUADRANGLE; MALIBU QUADRANGLE, CALIFORNIA; REVISION DATE 1981



SECOR

11085 KNOTT AVENUE, SUITE B
CYPRESS, CALIFORNIA
PHONE: (714)379-3366/FAX: (714)379-3375

PREPARED FOR:

ATLANTIC RICHFIELD COMPANY
FORMER ARCO FACILITY 1033
22661 PACIFIC COAST HIGHWAY
MALIBU, CALIFORNIA

JOB NUMBER:

14BP.01033.03.0630

DRAWN BY:

L. RAMIREZ

CHECKED BY:

E. YOUNG

APPROVED BY:

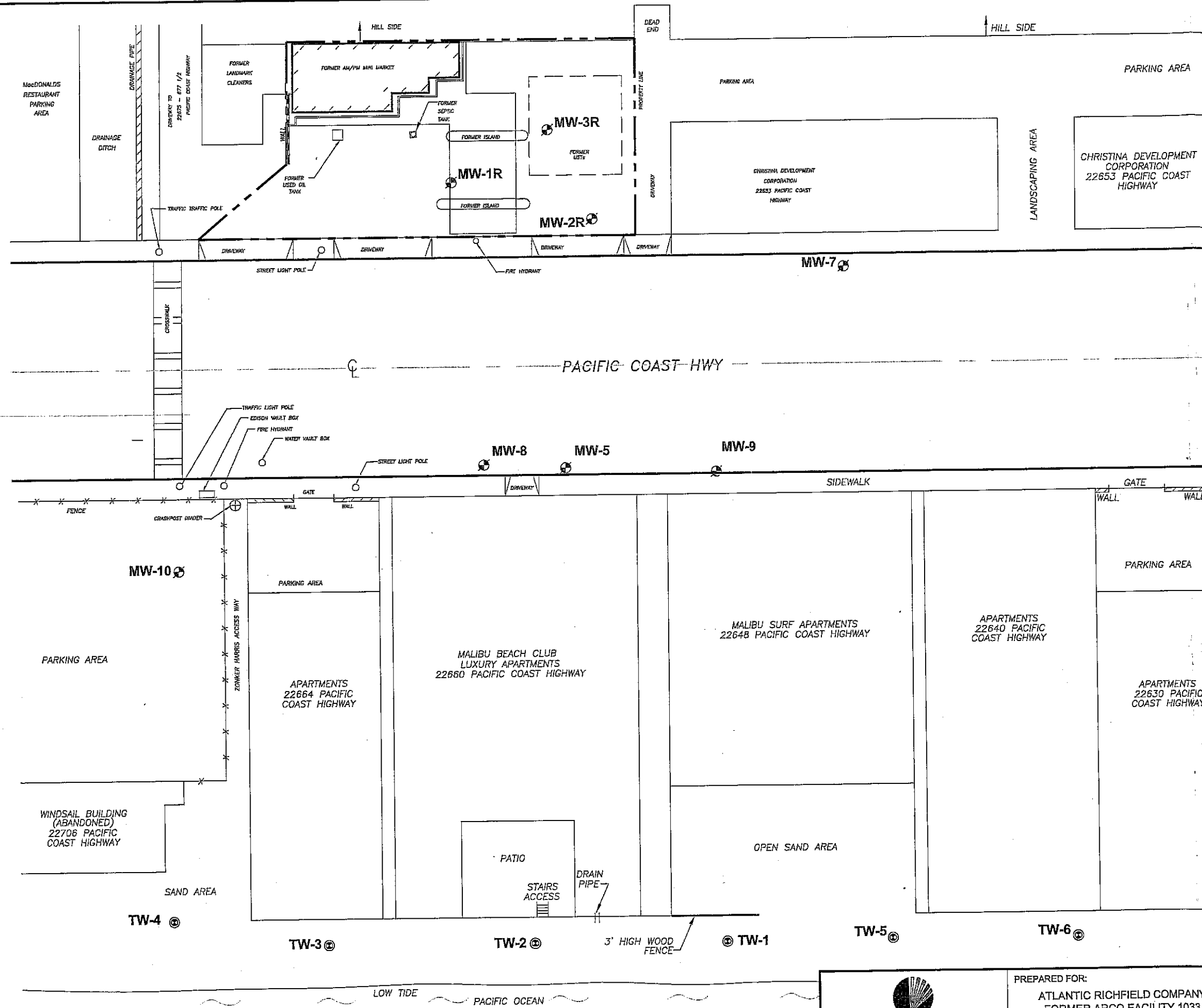
C. SANFORD

FIGURE:

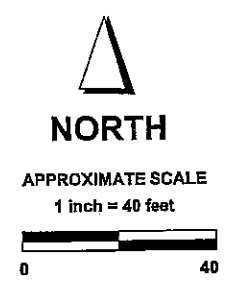
1

DATE:

APRIL 2005




- LEGEND:**
- SITE PROPERTY LINE
 - MW-5 ABANDONED GROUNDWATER MONITORING WELL LOCATIONS
 - TW-1 APPROXIMATE LOCATION OF TEMPORARY GROUNDWATER SAMPLING WELL



NOTES:

1. SOURCE OF BASEMAP: DELTA ENVIRONMENTAL CONSULTANTS, DATED MARCH 15, 2002.

 SECOR 11085 KNOTT AVENUE, SUITE B CYPRESS, CALIFORNIA PHONE: (714)379-3366/FAX: (714)379-3376	PREPARED FOR: ATLANTIC RICHFIELD COMPANY FORMER ARCO FACILITY 1033 22661 PACIFIC COAST HIGHWAY MALIBU, CALIFORNIA		SITE PLAN WITH FORMER WELL LOCATIONS		FIGURE: 2
	JOB NUMBER: 14BP.01033.03.0630	DRAWN BY: L. RAMIREZ	CHECKED BY: E. YOUNG	APPROVED BY: C. SANFORD	DATE: APRIL 2005

Appendix A

LACRWQCB's December 20, 2004 Correspondence Letter



California Regional Water Quality Control Board Los Angeles Region



Dr. Alan Lloyd
Secretary for
Environmental
Protection

Recipient of the 2001 Environmental Leadership Award from Keep California Beautiful

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

December 20, 2004

Mr. Roy Thun
ARCO Products Company
4 Centerpointe Drive
La Palma, CA 90623-0166

**UNDERGROUND STORAGE TANK PROGRAM – CASE CLOSURE
ARCO FACILITY NO. 1033
22661 PACIFIC COAST HIGHWAY, MALIBU (ID NO. I-06026) (CUFID NO. 3949)**

This letter confirms the completion of a site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground tank(s) site is in compliance with the requirements of subdivision (a) and (b) of section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (g) of section 25296.10 of the Health and Safety Code.

If you have groundwater monitoring wells and/or vapor extraction wells at the subject property, you must comply with the following:

1. All wells must be properly located and abandoned.
2. Well abandonment permits and all other necessary permits must be obtained from the appropriate agencies prior to the start of work.
3. You must submit a report on the abandonment of the wells to this office by **March 15, 2005**. This report must include, at a minimum, a site map, a description of the well abandonment process, and copies of all signed permits.

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Mr. Roy Thun
ARCO Products Company

- 2 -

December 20, 2004

Please contact Dr. Tom Shih at (213) 576-6729 or e-mail him at tshih@waterboards.ca.gov if you have any questions regarding this matter.


Sincerely,

ORIGINAL SIGNED BY

Jonathan S. Bishop
Executive Officer

Cc: Ms. Yvonne Shanks, State Water Resources Control Board, Underground Storage Tank
Cleanup Fund
Ms. Nancy Matsumoto, Water Replenishment District of Southern California
Ms. Cathy Sanford, SECOR International, Inc.
Mr. Albert E. Strauss
Mr. Bruce A. Thabit
Mr. Donald T. Sterling
Mr. Eugene Monkarsh
Mr. Jerrold Monkarsh
Mr. Alon Abady, Pacific Home Equities, LLC.
Mr. Keith Milliken, Pacific Home Equities, LLC.
Mr. Louis Hellbron, Weintraub Financial Services

California Environmental Protection Agency

 Recycled Paper

Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Mr. Roy Thun
ARCO Products Company

- 3 -

December 20, 2004

California Environmental Protection Agency

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Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Mr. Roy Thun
ARCO Products Company

- 4 -

December 20, 2004

California Environmental Protection Agency



Recycled Paper

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Appendix B

SECOR's March 14, 2005 Correspondence Letter



SECOR
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March 15, 2005
14BP.01033.03.0636

Mr. Tom Shih
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

RE: Request for Due Date Extension
Well Abandonment Report
Former ARCO Facility 01033
22661 Pacific Coast Highway
Malibu, California
CRWQCB LA ID No. I-06026

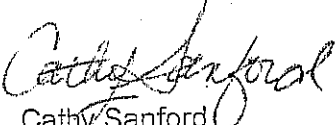
Dear Mr. Shih:

SECOR International Incorporated (SECOR), on behalf of Atlantic Richfield Company (Atlantic Richfield), submits this letter documenting the March 14, 2005 telephone voicemail and email due date extension request submitted by Ms. Cathy Sanford of SECOR to Mr. Tom Shih of the California Regional Water Quality Control Board – Los Angeles Region (CRWQCB-LA). Specifically, SECOR requested a two week extension to submit the Well Abandonment Report due to the CRWQCB-LA on March 15, 2005 for the referenced site. The on site wells were abandoned on February 22, 2005 and the street well abandonment had to be postponed due to inclement weather as the Department of Transportation (DOT) permit did not allow street excavation during rain. As of March 8, 2005, all field work has been completed and the extended time is needed to receive the waste manifests and complete the reporting of field activities.

A telephone voicemail message received by SECOR on March 15, 2005 from Mr. Tom Shih of the CRWQCB-LA granted the report due date extension. SECOR hereby submits this letter documenting CRWQCB-LA's approval of an extension for the submittal of the Well Abandonment Report from the original March 15, 2005 due date to a due date of March 29, 2005.

Thank you for your help with this matter. If you have any questions regarding the contents of this submittal, please contact the undersigned at (714) 379-3366.

Respectfully submitted,
SECOR International Incorporated


Cathy Sanford
Associate Geologist
Project Manager

Cc: Mr. Roy Thun, Atlantic Richfield Company

Appendix C

Permits

705-6SV-0266

In compliance with (check one) :

Dist/Co/Rte/PM
07-LA-001-46.37

Date
February 2, 2005

Fee Paid
\$ 410.00

Deposit
\$

Performance Bond Amount (1)
\$

Payment Bond Amount (2)
\$

Bond Company

Bond Number (1)

Bond Number (2)

TO:

ATLANTIC RICHFIELD COMPANY
C/O SECOR INTERNATIONAL, INC.
11085 KNOTT AVENUE, SUITE B
CYPRESS, CA 90630

ATTN: ERIC YOUNG
PHONE: (714) 379-3366 X234

, PERMITTEE

AND SUBJECT TO THE GENERAL PROVISIONS AND THE FOLLOWING, PERMISSION IS HEREBY GRANTED TO:
ENCROACH WITHIN STATE HIGHWAY RIGHT-OF-WAY OF ROUTE 001, IN THE CITY OF MALIBU (07-LA-001-46.37)
FOR THE PURPOSE OF PERFORMING TRAFFIC CONTROL AND THE ABANDONMENT OF EXISTING MONITORING
WELLS (WELLS #5, 7, 8, & 9) INSTALLED UNDER ENCROACHMENT PERMITS 791-6MW-2686 & 700-6SV-2697, NEAR
22661 PACIFIC COAST HIGHWAY; ALL IN ACCORDANCE WITH THE CURRENT STATE STANDARD SPECIFICATIONS,
THE ATTACHED SPECIAL PROVISIONS, AND PERMIT PLANS DATED FEBRUARY 2, 2005.

PERMITTEE SHALL CONTACT STATE INSPECTOR MR. DON DALBEY, BETWEEN THE HOURS OF 7 A.M. AND 9
A.M., AT TELEPHONE NO. (805) 654-4508, A MINIMUM OF TEN DAYS PRIOR TO THE INITIAL START OF WORK
TO ARRANGE A PRE-JOB MEETING. A CONFIRMATION NOTIFICATION SHALL OCCUR THREE DAYS PRIOR TO
CLOSURE OR OTHER POTENTIAL TRAFFIC IMPACTS.

BY ACCEPTANCE OF THIS PERMIT, THE PERMITTEE UNDERSTANDS AND AGREES TO REIMBURSE THE STATE FOR ANY AND ALL COSTS INCURRED FOR HAVING CORRECTIVE WORK
PERFORMED BY STATE FORCES OR UNDER CONTRACT IN THE EVENT THAT THE PERMITTEE, HIS CONTRACTOR OR SUBCONTRACTOR FAIL TO INSTALL, REPLACE, REPAIR, RESTORE, OR
REMOVE FACILITIES TO STATE SPECIFICATIONS FOR THE IMMEDIATE SAFE OPERATION OF THE HIGHWAY AND SATISFACTORY COMPLETION OF ALL PERMIT WORK. IT IS UNDERSTOOD
THAT THE ABOVE CHARGES ARE IN ADDITION TO ANY PERMIT FEES AND THAT THE PERMITTEE WILL BE BILLED FOR SAID CHARGES AFTER SATISFACTORY COMPLETION OF ALL WORK.

The following attachments are also included as part of this permit.
(Check applicable):

In addition to fee the permittee will be
billed actual costs for:

<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	General Provisions
<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	Utility Maintenance Provisions
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Special Provisions A, B, C, Q, & Stormwater
<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No	A Cal-OSHA permit required prior to beginning work;

<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Review
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Inspection
<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	Field Work

(If any Caltrans effort Extended)

☐ Yes ☒ No The information in the environmental documentation has been reviewed and considered prior to approval of this permit.

This permit is void unless the work is completed before **December 31, 2005**

This permit is to be strictly construed and no other work than specifically mentioned is hereby authorized.
No project work shall be commenced until all other necessary permits and environmental clearances have been obtained.

WEST REGION
LAS FLORES
DALBEY, INSP

APPROVED:

Hector Obeso, District Permit Engineer

By:

ALAN DAVIS Permit Engineer

SPECIAL PROVISIONS:

1. SHOULD THERE BE ANY DISCREPANCY BETWEEN THE TERMS OF THIS PERMIT AND THE PLANS ATTACHED HERETO, THE TERMS OF THIS PERMIT SHALL PREVAIL.
2. **AS DIRECTED BY THE STATE PERMIT INSPECTOR, ALL TRAFFIC CONTROL DEVICES SHALL BE SET AND MAINTAINED BY A LICENSED TRAFFIC CONTROL CONTRACTOR.**
3. Prior to performing any work pursuant to this permit, the permittee shall obtain all necessary permits and authorizations required of other governmental agencies such as the Environmental Protection Agencies. The permittee shall make the necessary arrangements to ensure that said work and testing are monitored by the appropriate agencies and performed in accordance with the requirements of those agencies.
4. At completion of abandonment, a copy of all records concerning the abandonment of the wells shall be submitted to the state Permit Inspector.
5. **Wells and other related appurtenances shall be removed and abandoned in accordance with the attached sheets No.s 50 thru 54 of the California Department of Water Resources Bulletin "California Well Standard" No. 74-90 dated June 1991, which is made part of this permit.**
6. As directed by the State Permit Inspector, the State right-of-way shall be restored to its former condition. Damaged curb, gutter, or sidewalk shall be removed and replaced to the nearest score marks beyond the location of the abandoned well.
7. It is the Permittee's responsibility to ensure that no pollutants whatsoever are allowed to enter into the State right-of-way or contaminate the environment due to any effects which may occur as a result of the implementation of this permit.
8. All traffic control requiring lane closures, shall be in accordance with the attached Lane Closure on Pacific Coast Highway Policy, unless otherwise approved by the State Permit Inspector.
9. All traffic control and traffic control devices shall be provided by the Permittee in accordance with the Manual on Uniform Traffic Control Devices 2003 and the California Supplement and shall be subject to the approval of the State Permit Inspector.
10. All lane closures on multilane highways within State right-of-way shall be made using an approved flashing arrow sign. The State Inspector shall close down any project found to have such a lane closure without the required flashing arrow signs.
11. A minimum of two days prior to the start of any excavation authorized by this Permit, Permittee shall notify UNDERGROUND SERVICE ALERT at 1-800-422-4133.
12. Care shall be exercised at all times to protect existing State facilities. Any damage resulting from work of this permit shall be repaired immediately by Permittee to the satisfaction of the State Permit Inspector at no cost to the State.
13. Pedestrian traffic shall be protected at all times.
14. No work shall begin on this permit until a complete understanding has been reached with the State Permit Inspector regarding the work and all aspects of traffic control.
15. All work performed pursuant to this permit shall be subject to the approval and authority of the State Permit Inspector.
16. Safety vests and hard hats shall be worn at all times while working within State Highway right-of-way.

17. Permittee or Permittee's contractor is required to have the signed original permit or copies with all special provisions, at the job site at all times while work is being conducted. Work shall be suspended if permit is not at jobsite.

" BY ACCEPTANCE OF THIS PERMIT, THE PERMITTEE UNDERSTANDS AND AGREES TO REIMBURSE THE STATE FOR ANY AND ALL COSTS INCURRED FOR HAVING CORRECTIVE WORK PERFORMED BY STATE FORCES OR UNDER CONTRACT IN THE EVENT THAT THE PERMITTEE, HIS CONTRACTOR OR SUBCONTRACTOR FAILS TO INSTALL, REPLACE, REPAIR, RESTORE OR REMOVE FACILITIES TO STATE SPECIFICATIONS FOR THE IMMEDIATE SAFE OPERATION OF THE HIGHWAY AND SATISFACTORY COMPLETION OF ALL PERMIT WORK.

IT IS UNDERSTOOD THAT THE ABOVE CHARGES ARE IN ADDITION TO ANY PERMIT FEES AND THAT THE PERMITTEE WILL BE BILLED FOR SAID CHARGES AFTER SATISFACTORY COMPLETION OF ALL PERMIT WORK "

Permittee, his agents or contractors are bound by and shall comply with all provisions of this permit and the instructions of the State representative while performing any work authorized by this permit.

WORK SHALL BE SUSPENDED IF PERMIT COPY IS NOT AT JOB SITE.

IMMEDIATELY FOLLOWING COMPLETION OF THE WORK PERMITTED HEREIN, THE PERMITTEE SHALL FILL OUT AND MAIL THE NOTICE OF COMPLETION ATTACHED TO THIS PERMIT.

The attached District Standard Special Provisions are generalizations of the Department Standard Specifications and are included only as a Permittee convenience. Permittee's attention is directed to the current Department Standard Specifications for complete, unabridged, Specification requirements.

Jan 27 05 10:08a

WELL PERMIT APPLICATION **NON-PRODUCTION WELLS**
 WATER & SEWAGE / MOUNTAIN & RURAL PROGRAMS - ENVIRONMENTAL HEALTH DIVISION
 5050 COMMERCE DRIVE, BALDWIN PARK, CA 91706 (626) 430-5380 FAX (626) 813-3016

DATE:

<input type="checkbox"/> NEW WELL CONSTRUCTION <input checked="" type="checkbox"/> RECONSTRUCTION OR RENOVATION <input type="checkbox"/> DECOMMISSIONING <input type="checkbox"/> OTHER:	<input type="checkbox"/> MONITORING <input type="checkbox"/> CATHODIC <input type="checkbox"/> INJECTION <input type="checkbox"/> EXTRACTION	<input type="checkbox"/> HEAT EXCHANGE <input type="checkbox"/> OTHER (Specify):
---	---	---

WELL LOCATION	SITE ADDRESS 22661 PACIFIC COAST HIGHWAY CITY MALIBU ZIP CODE	
	Township	Range
	Section	Map Book Page/ Grid
NO. OF WELLS IN EACH PARCEL: 8 Attach site map with well locations		

WELL STRUCTURE	Type and Size of Production Casing	4" CASING
	Sanitary / Annular Sealing Material	BETONITE
	Depth of Sanitary / Annular Seal	VARIABLE
	Conductor Casing Seal	BETONITE

Company	SECOR INTERNATIONAL INC	CONSULTANT
Contact Person	ERIC YOUNG	
Address	11025 KNOTT AVE., SUITE B	
City, State Zip	CYPRESS, CA. 90630	
Telephone	(714) 879-5366	


OWNER / DRILLER INFORMATION	Well Owner	ATLANTIC RICHFIELD
	Address	4 CENTERPOINTE DRIVE
	City / Zip Code	LA PALMA / 90623
	Telephone	(818) 957-1755
	Well Driller	COREPROBE INTERNATIONAL INC.
	Address	1442 ARROW HIGHWAY STE. N
	City / Zip Code	IRVINDALE / 91706
	C-57 License No.	C-57 - 772519
Telephone	(626) 805-9176	

IF WELL AND GEOLOGIC CONDITIONS ENCOUNTERED IN THE FIELD ARE FOUND TO DIFFER FROM THE SCOPE OF WORK PRESENTED TO THIS OFFICE, WORK PLAN MODIFICATIONS MAY BE REQUIRED

DISPOSITION OF PERMIT (Department Use Only)
 THIS PERMIT IS CONSIDERED COMPLETE WHEN THE WORK PLAN IS APPROVED AND WHEN THE WELL COMPLETION LOG IS RECEIVED. NO WELL CONSTRUCTION OR DECOMMISSIONING CAN BE INITIATED WITHOUT THE WORK PLAN APPROVAL FROM THIS DEPARTMENT.

WORK PLAN APPROVAL	
This Approval is Valid for 180 Days	
Date 1-20-2005	REHS <i>[Signature]</i>
Conditions R-E-H-S	

WELL DECOMMISSIONING	Well Depth log / records	18.50' - 29.40'
	Method of Well Assessment	PRESSURE CROUT & DEPT UPPER 5'
	Depth and Number of Perforations	VARIABLE
	Type of Perforator Size of Perforations	VARIABLE (0.02 INCH)
	Type and Amount of Sealant	VARIABLE (BETONITE)
	Method of Upper Seal Pressure Application	BETONITE CROUT

 COUNTY OF LOS ANGELES DEPARTMENT OF HEALTH SERVICES PUBLIC HEALTH PROGRAMS	ARNOLD FIELDING, R.E.H.S., M.S. Environmental Health Specialist III ENVIRONMENTAL HEALTH BUREAU OF ENVIRONMENTAL PROTECTION Mountain & Rural/Water, Sewage & Subdivision Program MALIBU OFFICE 23525 West Civic Center Way Malibu, California 90265 Phone (310) 317-1317 (Tuesday - Friday) Fax (310) 317-0214 Message (626) 430-5380
---	--

I hereby agree to comply in every respect with all the regulations of the County Environmental Health Division and with all ordinances and laws of the County of Los Angeles and the State of California pertaining to well construction, reconstruction and decommissioning. Upon completion of the well and within thirty days thereafter, I will furnish the Environmental Health office with a completion log of the well giving date drilled, depth of the well, perforations in the casing, and any other data deemed necessary by County Environmental Health Division.

[Signature] for SECOR INT. INC.
 Applicant's Signature

Applicant Name: (PRINT)
 Telephone:

FINAL INSPECTION	
Date	REHS
PERMIT ISSUED	
The well log must be submitted to this Department prior to issuance of the final approval	
Date	REHS

Appendix D

Boring Logs

SECOR

International Corporation

Logged By: R. Handbury	Date Drilled: 2/24/03	Drilling Contractor: West Hazmat Drilling	Project Name: ARCO No. 1033 22601 Pacific Coast Hwy., Malibu, CA	Method/Equipment: Mod. CA. Split Spoon CME-75	Boring Number: MW-1R
See "Legend to Logs" for sampling method, classifications and laboratory testing methods		Boring Diam.(in.): 8	Surface Elev.(ft.): 11 First Encountered 10 Stabilized	Groundwater Depth (ft.): 21.5	Total Depth (ft.): 140
Well Construction	Depth (ft.)	Sample Interval	Flow Counts 6"	Description	Sample Method/ Sample type

Well Cover Cement						
Hydrated Bentonite Chip Seal						
No. 2/16 Sand Pack	5	9		WELL GRADED SAND (SW): Artificial fill, brown (7.5YR 4/2), slightly moist, dense, fine to coarse-grained, moderate hydrocarbon odor	MC	
		14			E	2,596
		18				
	10	10		GRAVEL (GW): Artificial fill, dark gray (5YR 4/1), wet, dense, coarse-grained sand with approximately 90% gravel, slight hydrocarbon odor	MC	
		15			E	1,200
		18				
2" Sch 40 PVC 0.010" Slotted Well Screen	15	16		WELL GRADED SAND WITH GRAVEL (SW): Artificial fill, brown (7.5YR 4/4), very moist, dense, fine to coarse-grained sand with approximately 20% gravel, strong hydrocarbon odor	MC	
		24			E	>9,999
		30				
End Cap	20	15		WELL GRADED SAND WITH GRAVEL (SW): Artificial fill, brown (7.5YR 4/4), very moist, dense, fine to coarse-grained sand with approximately 25% gravel, hydrocarbon odor	MC	
		22			E	3,500
		28				
Total Depth = 21.5 Feet bgs						
SAMPLE METHOD MC = Modified California Split Spoon SAMPLE TYPE E = Encore						

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. 37BP.01033.01.0146 Date MARCH 2003

Log of Boring

A1033.GPJ
LOG OF BOREHOLE

Approved by _____

Figure _____ (sheet 1 of 1)

SECOR

International Incorporated

Project Name: ARCO No. 1033 22661 Pacific Coast Hwy., Malibu, CA		Method/Equipment: Mod. CA. Split Spoon CME-75		Boring Number: MW-2R	
R. Handbury 2/24/03		Drilling		Groundwater Depth (ft.): 10.5 First Encountered 10.8 Stabilized	
See "Legend to Logs" for sampling method, classifications and laboratory testing methods		Boring Diam. (in.): 8		Total Depth (ft.): 21.5	
Surface Elev. (ft.):		Drive wt. (lbs.): 140		Drop Dist. (m.): 30	
Well Construction	Depth, (ft.)	Sample Interval	Blow Counts 6"	Description	Sample Method/ Sample type
					PID/FID Reading (ppm)

Well Cover Cement						
Hydrated Bentonite Chip Seal						
No. 2/16 Sand Pack	5	7		POORLY GRADED SAND (SP): Artificial fill, brown (7.5YR 5/2), moist, medium density, fine-grained, moderate hydrocarbon odor	MC	4,300
		10			E	
		11				
	10	9		WELL GRADED SAND WITH GRAVEL (SW): Artificial fill, very dark gray (2.5YR 3/1), wet, dense, fine to coarse-grained, strong hydrocarbon odor	MC	>9,999
		12			E	
		16				
2" Sch 40 PVC 0.010" Slotted Well Screen	15	10		WELL GRADED SAND WITH GRAVEL (SW): Artificial fill, very dark grayish brown (2.5YR 3/2), moist, dense, fine to coarse-grained, moderate hydrocarbon odor	MC	6,948
		16			E	
		22				
End Cap	20	10		WELL GRADED SAND WITH GRAVEL (SW): Artificial fill, very dark gray (2.5YR 3/1), moist, dense, fine to coarse-grained, slight hydrocarbon odor	MC	1,907
		14			E	
		17				
Total Depth = 21.5 Feet bgs				SAMPLE METHOD MC = Modified California Split Spoon		
				SAMPLE TYPE E = Encore		

The substrata descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. 37BP.01033.01.0146 Date MARCH 2003

Log of Boring

A1033.GPJ
LOG OF BOREHOLE

Approved by _____

Figure _____

(sheet 1 of 1)

SECOR

International Incorporated

Logged By: R. Handbury	Date Drilled: 2/24/03	Drilling Contractor: West Hazmat Drilling	Project Name: ARCO No. 1033 22661 Pacific Coast Hwy., Malibu, CA	Method/Equipment: Mod. CA. Split Spoon CME-75	Boring Number: MW-3R
See "Legend to Logs" for sampling method, classifications and laboratory testing methods		Boring Diam. (in.): 8	Surface Elev. (ft.): 10.95 First Encountered 10.95 Stabilized	Total Depth (ft.): 21.5	Drive wt. (lbs.): 140
					Drop Dist. (in.): 30

Well Construction	Depth (ft.)	Sample Interval	Blew Counts 6"	Description	Sample Method/ Sample type	PID/FID Reading (ppm)
Well Cover Cement						
Hydrated Bentonite Chip Seal						
No. 2/16 Sand Pack	5	5 12 18		<u>POORLY GRADED SAND (SP):</u> Artificial fill, brown (7.5YR 4/3), slightly moist, medium density, fine-grained, no hydrocarbon odor	MC E	0.0
	10	17 49 23		<u>WELL GRADED SAND WITH GRAVEL (SW):</u> Artificial fill, dark gray (7.5YR 4/1), wet, very dense, fine to coarse-grained with approximately 30% gravel, no hydrocarbon odor	MC E	0.0
2" Sch 40 PVC 0.010" Slotted Well Screen	15	19 26 30		<u>WELL GRADED SAND WITH GRAVEL (SW):</u> Artificial fill, brown (7.5YR 4/2), moist, very dense, fine to coarse-grained sand with approximately 20% gravel, no hydrocarbon odor, tank pit cloth material noted	MC E	0.0
End Cap	20	17 27 32		<u>WELL GRADED SAND WITH GRAVEL (SW):</u> Brown (7.5YR 4/2), moist, very dense, fine to coarse-grained sand with approximately 10% gravel, no hydrocarbon odor Total Depth = 21.5 Feet bgs	MC E	0.0
<u>SAMPLE METHOD</u> MC = Modified California Split Spoon <u>SAMPLE TYPE</u> E = Encore						

The substrate descriptions above are generalized representations and based upon visual/manual classification of cuttings and/or samples obtained during drilling. Predominant material types shown on the log may contain different materials and the change from one predominant material type to another could be different than indicated. Descriptions on this log apply only at the specific location at the time of drilling and may not be representative of subsurface conditions at other locations or times.

Project No. 37BP.01033.01.0145 Date MARCH 2003

Log of Boring

Approved by







A1033.GPJ
LOG OF BOREHOLE

Figure

(sheet 1 of 1)

DRILLING & LITHOLOGIC LOG




Well/Boring #MW5

Project: Arc/22661 Pacific Coast Highway		Owner: Arco Petroleum Products, Inc.	
Location: Malibu, CA		Project Number: 021501810	
Date Drilled: August 11, 1992	Total Depth of Boring (feet): 20	Diameter (inches): 7	
Surface Elevation AMSL (feet): ~14.00 (USGS Quad.)	Total Depth of Well (feet): 20		
Depth-to-Water at Time of Drilling (feet): 10	24-Hour Water Level (feet): N/A		
Screen Diameter (inches): 2	Length (feet): 15	Slot Size (inches): 0.01	
Casing Diameter (inches): 2	Length (feet): 5	Type: Schedule 40 PVC	
Drilling Company: A & R Drilling, Inc.		Drilling Method: Hollow Stem Auger	
Sample Type: Mod. Calif. Split Spoon (3-6" Brass Rings)		Core Sample Diameter (inches): 1.5	
Core Sample Condition Legend:		Elevation Symbols:	
 Undisturbed  Disturbed  No Recovery		 Groundwater  Perched Water  Free Product	

Driller: Steve Kosner

Log By: Doug Ford

Checked By: *Larry Higinbotham* R-6-5497

Depth (Feet)	Well Const.		PID (PPM)	Samples			Graphic Log	USCS Symbol	Description
	Pipe	Fill		Number	Condition	Blows			
0							Grade	GM ML	9:30 am 5 inches of double layered Asphalt at grade. Road Base under Asphalt.
5			30	MW5-5		4 6 6		SP	SILT with Gravel at one foot: Brown, about 75% Silt, about 15% fine to coarse Gravel, about 10% coarse Sand.
10			180	MW5-10		10 15 17		SP	Poorly graded SAND: Light brown, about 95% fine, subangular, quartz Sand, about 5% medium Sand; medium dense, moist, no hydrocarbon odor.
15						10 11 15		SP	Poorly graded SAND: Light brown, about 95% fine Sand, about 5% medium Sand; dense, wet to saturated at 10 feet, faint hydrocarbon odor.
									Poorly graded SAND: Gray-brown, about 50% fine Sand, about 30% medium Sand, about 10% coarse Sand, about 10% fine to coarse Gravel; medium dense, water saturated, no hydrocarbon odor. Decreasing auger speed, cobbles and large gravel, first encountered at 16.5 feet. 10:50 am

GROUNDWATER TECHNOLOGY, INC.

20000/200 Mariner Avenue • Torrance, California 90503 • (310) 371-1394



GROUNDWATER TECHNOLOGY, INC.

September 21, 1992

Drawn By: GTI (b)

Page: 1 of 2

DRILLING & LITHOLOGIC LOG

Well/Boring #MW5

Project: Arc/22661 Pacific Coast Highway				Owner: Arco Petroleum Products, Inc.					
Location: Malibu, CA				Project Number: 021501810					
Depth (Feet)	Well Const.		PID (PPM)	Samples			Graphic Log	USCS Symbol	Description
	Pipe	Fill		Number	Condition	Blows			
20									End of drilling at 20 feet. Soil sampled to 16.5 feet. Groundwater first encountered at 10 feet. Soil cuttings placed in labeled 55-gallon drums, sealed, and stored on site. Borehole converted to groundwater monitoring well.
25									
30									
35									
40									
45									

GROUNDWATER TECHNOLOGY, INC.

20000/200 Mariner Avenue • Torrance, California 90503 • (310) 371-1394

Date: September 14, 1992

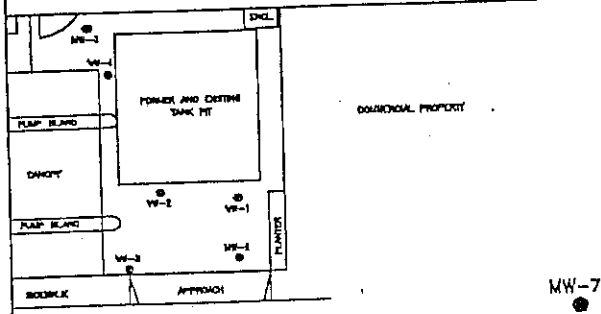
Drawn By: GTI (b)

Page: 2 of 2



**GROUNDWATER
TECHNOLOGY, INC.**

LOCATION MAP



LOG OF BORING MW-7

ARCO SERVICE STATION NO.1033
22661 W. PACIFIC COAST HIGHWAY
MALIBU, CALIFORNIA

PROJECT NO.: OC0059.001
LOGGED BY: N. Molla
DRILLING CO.: Drill-Line
DRILLED DATE: march 10, 1994
DRILLING METHOD: Hollow Stem Auger
SAMPLING METHOD: Split Spoon
INCLINATION: Vertical

WELL CONSTRUCTION

DEPTH (FT)	BLOWS/FT	PID	SAMPLE DEPTH	SAMP. RETURNED	GRAPHIC
0					
8					
10					
18		400			
5					
11					
14		600			
15					
10					
15		>1000			
20		>1000			
25					
30					

LITHOLOGIC DESCRIPTION

DIRT SURFACE CONDITIONS

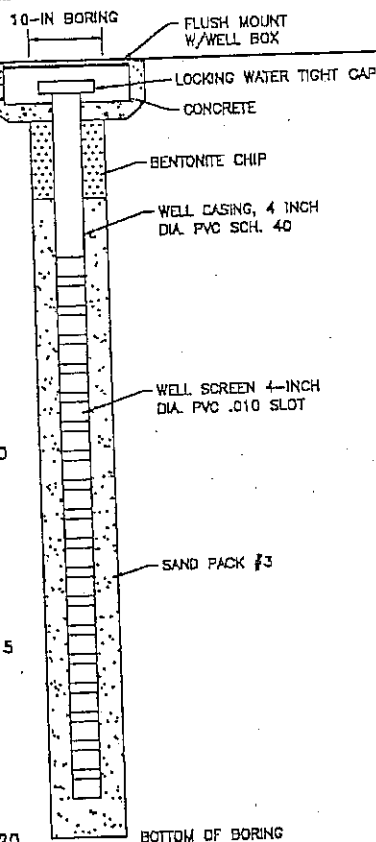
SAND (SP) light brown; very fine-grained, medium dense, moist; crumbly; little angular pebbles

becomes greenish gray; medium-grained; moist to wet

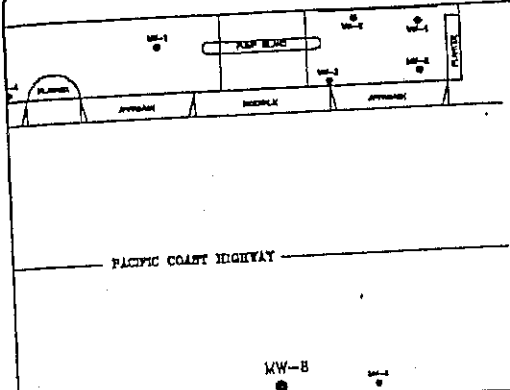
becomes light gray

increasing coarse grained sand and sub-rounded to sub-angular pebbles

BOTTOM OF BORING AT 20 FEET



LOCATION MAP

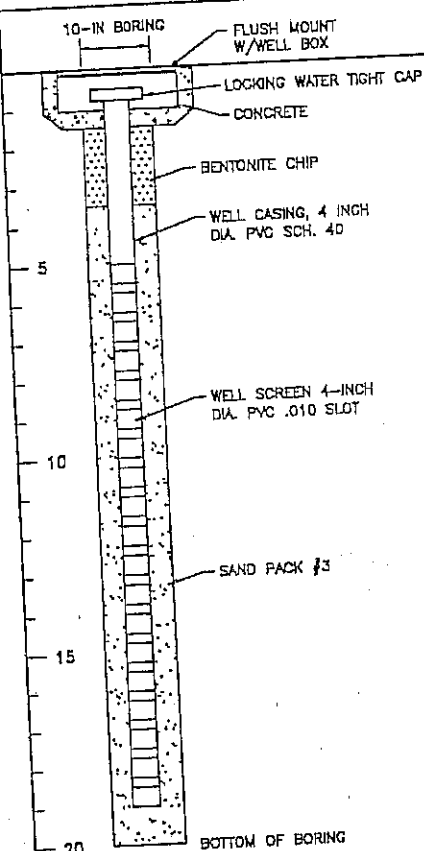


LOG OF BORING MW-8

ARCO SERVICE STATION NO.1033
22661 W. PACIFIC COAST HIGHWAY
MALIBU, CALIFORNIA

PROJECT NO.: OC0059.001
LOGGED BY: N. Molla
DRILLING CO.: Drill-Line
DRILLED DATE: march 10, 1994
DRILLING METHOD: Hollow Stem Auger
SAMPLING METHOD: Split Spoon
INCLINATION: Vertical

WELL CONSTRUCTION



LITHOLOGIC DESCRIPTION

DIRT SURFACE CONDITIONS

SAND (SW) light brown, fine to coarse grained; medium dense; moist; well sorted; sub-rounded; occasional pebble

because wet at approximately 10 feet

BOTTOM OF BORING AT 20 FEET



GERAGHTY
& MILLER, INC.

ORANGE COUNTY OFFICE
One Technology Drive, Suite 7213
Irvine, California 92718

DRAWN BY: SKP
DWG NAME: 1033-MW8
DISK NO.: GMIRD018

MW-8

SHEET
1
of
1



Delta
Environmental
Consultants, Inc.

Page 1 of 1

WELL CONSTRUCTION LOG

BORING/WELL LOCATION SKETCH MAP

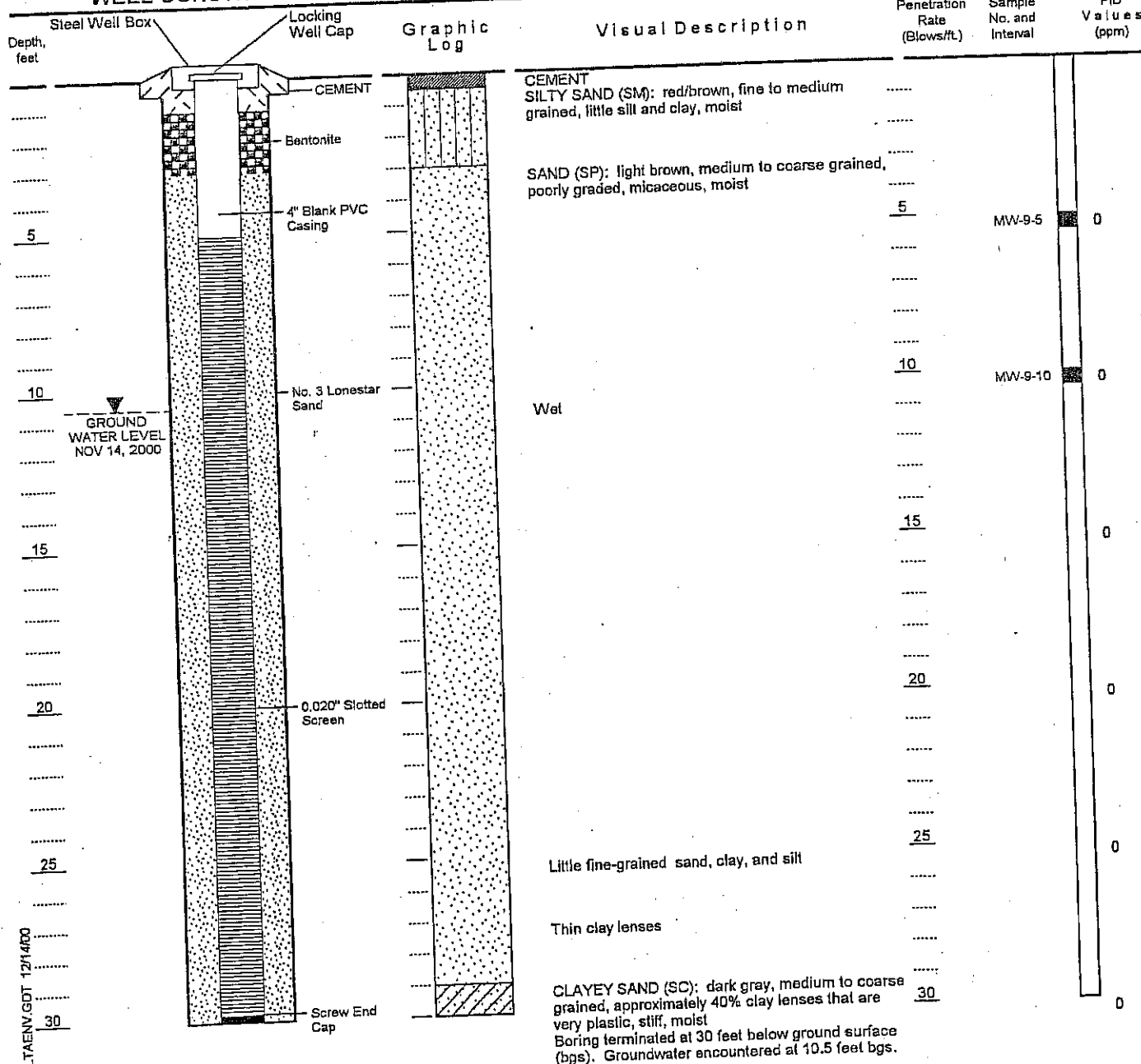


BORING/WELL NO. MW-9		LOCATION 22661 Pacific Coast Highway Malibu, California	
PROJECT NO./NAME L098-630/ARCO Facility No. 1033		APPROVED BY Dennis Rourke, RG 6974	
DRILLING CONTRACTOR/DRILLER West Hazmat/Steve		SIZE/TYPE OF BIT 10.5"/Soil	SAMPLING METHOD CAM
GEOLOGIST/OFFICE D. Chambers/Orange County		START/FINISH DATE 11/14/00-11/14/00	
DRILLING EQUIPMENT/METHOD CME-75/HSA			
WELL INSTALLED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	CASING MAT./DIA. PVC	SCREEN: TYPE Slotted MAT. PVC	LENGTH 25' DIA. 4" SLOT SIZE 0.02"
ELEVATION OF: (FT. ABOVE M.S.L.)	GROUND SURFACE	TOP OF WELL CASING	TOP & BOTTOM SCREEN GW SURFACE
		DATE 11/14/00	

WELL CONSTRUCTION

LITHOLOGY

SAMPLING DATA



WELL 98630.GPJ DELTAENV.GDT 12/14/00